WCS engagement + planning



Evaluation Handbook

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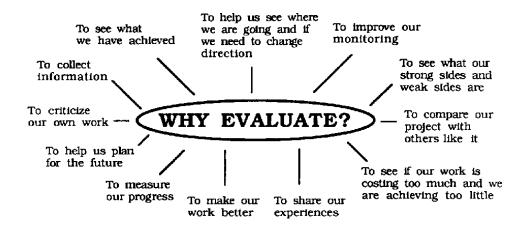
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Evaluation Overview

Why evaluate?

There are many excellent reasons for evaluating "interventions" (e.g., projects, programs, policies, campaigns etc.). From tracking progress to improving performance to deepening (positive!) impact, to proving accountability to sharing experiences, when done well, evaluation should prompt learning and result in better decision making and action. Specifically, evaluation results should render a deeper understanding of the challenge or problem the intervention proposes to address, as well as its results, both intended and unintended. Finally, evaluation should be inclusive and accessible such that the proposed beneficiaries of an intervention, and other affected stakeholders, are integrally involved in evaluating it and interpreting the results.¹



What is Evaluation?

Evaluation uses a systematic and intentional process combining evidence (quantitative and qualitative data) and values to inform learning, decision-making and action. Good evaluation helps people make better decisions for better outcomes. Different types of evaluation can be done throughout a program or policy cycle, before implementation, during implementation, or after implementation.² While

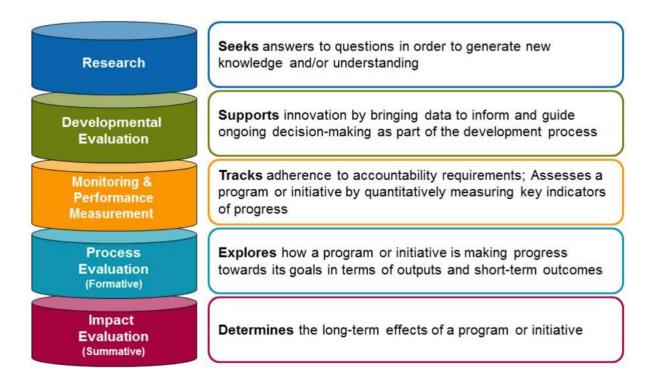
² BetterEvaluation (2022) Available online: https://www.betterevaluation.org/en/what-evaluation-slider



¹ Atlanta, Georgia: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; Division of Nutrition, Physical Activity, and Obesity. (2011) Developing an Effective Evaluation Plan.

evaluation is always about collecting information to better understand the "evaluand" (the intervention being evaluated), not all forms of inquiry are evaluative in nature. See figure below.³

Different Types of Inquiry Address Different Kinds of Information Needs



Evaluation, by definition, answers *evaluative* questions, that is, questions about quality and value. This is what makes evaluation so much more useful and relevant than the mere measurement of indicators or summaries of observations and stories.

In any evaluation, it is important to define first what is meant by 'success' (quality, value). One way of doing so is to use a specific rubric that defines different levels of performance (or standards) for each evaluative criterion, deciding what evidence will be gathered and how it will be synthesized to reach defensible conclusions about the worth of the intervention. See

To answer evaluative questions, what is meant by 'quality' and 'value' must first be defined and then relevant evidence gathered. Quality refers to how good something is; value refers to how good it is in terms of the specific situation, in particular considering the resources used to produce it and the needs it was supposed to address.



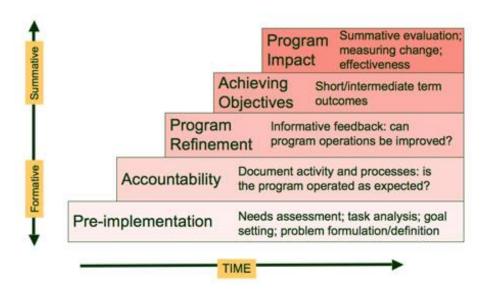
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³ Gopal, S. & Preskill, H. (2014). What is Evaluation, Really? Available: https://www.fsg.org/blog/what-evaluation-really/

Evaluative reasoning - the process of synthesizing the answers to lower- and mid-level questions into defensible judgements (i.e., well-reasoned and well evidenced) that directly answer the high-level questions - is a requirement of all evaluations, irrespective of the methods or evaluation approach used.

When to Evaluate?

Program Evaluation: Ages and Stages



Evaluation Types

To choose the appropriate evaluation method, it is necessary to understand the difference between evaluation types. There are a variety of evaluation designs, and the type of evaluation should match the development level of the program or program activity appropriately. The program stage and scope will determine the level of effort and the methods to be used.⁴⁵

Purpose	٧	When to Use & Priority Questions		What it Shows		Why it is Useful	W	ho the Typical Users are		w to measure (methods)
Pre-formative	•	When working in highly complex situations	•	Results of processes as they unfold	•	Prompts reflexivity, feedback,	•	Social innovators	•	Social network
Developmental Evaluation (DE)	•	When working on early- stage social	•	Implicit assumptions and patterns		continuous learning	•	Policy designers	•	mapping Scenarios

⁴ Center for Disease Control (2018). Program Operations Guidelines for STD Prevention manual on program evaluation. http://www.cdc.gov/std/program/ProgEvaluation.pdf.



⁵ Cabaj, M. (2011). *Developmental Evaluation: The Experience and Reflections of Early Adopters*, Master's Thesis, University of Waterloo, Retrieved June 6, 2020, from: https://uwspace.uwaterloo.ca/bitstream/handle/10012/6204/Cabaj_Mark.pdf?isAllowed=y&sequence=1

	innovations. Specifically, when: Innovation is identified as a core value There is an iterative loop of option generation, testing and selection Users (board, staff, stakeholders) are in agreement about innovation and willing to take risks There is a high degree of uncertainty about the path forward There are resources available for ongoing exploration has a culture suited to exploration and enquiry. Priority Questions: What is the problem we're trying to define? What are possible solutions and likely effects? What mechanisms for change are needed? Are they feasible?	Systems dynamics and interdependencies	in real time to spur changes in direction Supports emergent design and rapid prototyping Context specific understandings Develop new measures and monitoring mechanisms as goals emerge and evolve.	assuming lead roles in designing a program	 Simulations Modelling Delphi techniques (engaging experts) Living History DE Tool
Formative Evaluation Evaluability Assessment Needs Assessment	 During the development of a new program. When an existing program is being modified or is being used in a new setting or with a new population. Priority Questions: What works and what doesn't? What are program participants saying? How does this differ for different groups? How can we increase program benefits and reduce costs? 	 Whether the proposed program elements are likely to be needed, understood, and accepted by the population you want to reach. The extent to which an evaluation is possible, based on the goals and objectives. 	It allows for modifications to be made to the plan before full implementation begins. Maximizes the likelihood that the program will succeed.	 Program administrator Staff Participants those involved in day-to-day operations 	 Quality improvement Learning reviews Appreciative inquiry Reflective practice Participant feedback
Process Evaluation	As soon as program implementation begins.	 How well the program is working. 	 Provides an early warning for any 	 Program managers involved in 	 Management information systems



Program Monitoring	 During operation of an existing program. Priority Questions: Are inputs and processes running smoothly? What is the drop-out rate and why? Are outputs being produced ass anticipated and on schedule and budget? Where are the bottle necks? 	progra impler design • Wheth access	etent to which the am is being mented as leed. Here the program is lible an acceptable arget population.	•	problems that may occur. Allows programs to monitor how well their program plans and activities are working.	•	day-to-day operations Higher level decision- makers looking to link monitoring to planning and budget cycles	•	Quality control systems Routine reporting Performance indicators
Outcome Evaluation Objectives-Based Evaluation	 After the program has contacted at least one person or group in the target population. Priority Questions: Did the intervention do what it set out to do? Did it work? What were the direct and indirect effects? What were the positive and negative effects? Who experienced the above effects? 	progra	egree to which the im is influencing rget population's iors.	•	Tells whether the program is being effective in meeting its objectives.	•	Program designers Funders Researchers Planners Program managers involved in day-to-day operations	•	Outcomes harvesting Pre and post interviews with participants Ethnographic methods
Economic Evaluation: Cost Analysis, Cost- Effectiveness Evaluation, Cost- Benefit Analysis, Cost-Utility Analysis	 At the beginning of a program. During the operation of an existing program. To prove accountability Priority Questions: Are funds being used for intended purposes? Are goals and targets being met? Are staff qualified? 	used ii their c	resources are being n a program and osts (direct and ct) compared to nes.	•	Provides program managers and funders a way to assess cost relative to effects. "How much bang for your buck."	•	High-level decision- makers with executive, legislated or managerial or funding authority to ensure scarce resources are effectively and efficiently used	•	Mandated reporting Program audits and inspections Accreditation and licensing End of project reports Scorecards
Impact Evaluation Transformational Evaluation	 During the operation of an existing program at appropriate intervals. 	prograultima Impacultima potent transfe the int Interce betwe interve	ormative effects of tervention.	•	Reveals system dynamics to deepen understanding of the problem area Provides evidence for use in policy and funding decisions. Helps in conceptualizing and navigating systems change and complexity	•	Social innovators Modelers Managers of complex programs Systems change scholars Highest level decision- makers	•	Systems mapping Longitudinal studies Outcomes harvesting Meta analysis Lessons learned



•	transitions or transformations At the end of a program.	broader enviro and human/so systems costs benefits (econ- externalities).	cietal and	Weaves many concepts from transformations / transitions literatures	seeking to make long- term investment s or designing	
Prio	110W IS IIIIpacc	 The connection transformation and reality 			national / international programs	
•	structures or conditions are being targeted that inform a challenge area?	 Interconnection between envir ecosystems and systems sustain over time (i.e., interdepender people, planet profits) 	onmental d human nability the			
•	system components being addressed? What systems changes are occurring and how can systems change be captured overtime?	 Opportunities integration acr divisions, silos perspectives, l' divisions, and interests towa of a more sust and equitable 	oss differing historical competing rd a vision ainable			

Evaluation Users

Evaluation users are those who will use the evaluation process to make decisions about the intervention. There are potentially many different individuals or parties who would be interested in the results of an evaluation and should therefore be involved in its design and implementation. The number and diversity of users tends to grow with the size of the intervention and complexity of the challenge it proports to address. Users may include:

Intervention leaders and staff
Beneficiaries
Funders / Investors
The public
Partners
Researchers
Policy makers

Media

Regardless of the type of evaluation, it is important to think through who should be involved, why and how in each step of the evaluation process to develop an appropriate and context-specific participatory approach. Participation can occur at any stage of the impact evaluation process: in deciding to do an evaluation, in its design, in data collection, in analysis, in reporting and, also, in managing it.



Being clear about the purpose of participatory approaches in the evaluation is an essential first step towards managing expectations and guiding implementation. Is the purpose to ensure that the voices of those whose lives should have been improved by the programme or policy are central to the findings? Is it to ensure a relevant evaluation focus? Is it to hear people's own versions of change rather than obtain an external evaluator's set of indicators? Is it to build ownership of a donor-funded programme? These, and other considerations, would lead to different forms of participation by different combinations of stakeholders in the impact evaluation.⁶

The underlying rationale for choosing a participatory approach to evaluation can be either substantive (pragmatic), instrumental or normative (ethical), or a combination of the three. Substantive because better evaluations are achieved (i.e., better data, better understanding of the data, more appropriate recommendations, better uptake of findings); instrumental because participation can generate greater buy-in or normative because it is the right thing to do (i.e., people have a right to be involved in informing decisions that will directly or indirectly affect them, as stipulated by the UN human rights-based approach to programming).

The starting point for using participatory approaches in evaluation is to clarify what value and potential risks there are to the evaluation itself as well as to the people who would be closely involved. Three questions need to be answered in each situation:

- 1. What purpose will stakeholder participation serve in this impact evaluation?
- 2. Whose participation matters, when and why?
- 3. When is participation feasible?

Only after addressing these, can the issue of how to make impact evaluation more participatory be addressed.

How to Get Started

- 1. Clarify what is to be evaluation
- 2. Identify and engage evaluation users and key stakeholders
- 3. Determine resources and evaluability
- 4. Ask the right questions for achieving your evaluation goal
- 5. **Identify meaningful indicators**
- 6. Select suitable methods and tools of measurement
- 7. **(Co)-Create an evaluation plan**
- 8. Collect data
- 9. Process data and analyze results
- 10. Interpret and share the results
- 11. Apply findings act on them!
- 12. Make learning part of your organizational culture
- 13. Evaluate the evaluators, adjust, and improve on methods and tools

Our Approach

Principles

Regardless of the type of evaluation approach selected, we always apply the same principles.

Participatory

To evaluate interventions tackling complex challenges like climate change, a diversity of perspectives is needed. Participatory evaluation processes foster dialogue and reflexivity to reveal the inevitable power dynamics at play, as well as engage the many perceptions, knowledges, and experiences of said challenges and their address.

Utilization-focused

Utilization-focused means we design with evaluation end-users in mind to achieve their intended purposes and support sound decision-making.⁷ Decisions could range from the design of the next experiment, to making improvements, or to support scale-up.

Learning-oriented

Learning, an organized, intentional process of collectively generating and testing ideas relevant to problems, enables individuals from diverse backgrounds to better understand and thus respond to challenges, as well as reflect on and evaluate those responses over time.

Equity-centered

Equity is about recognizing diversity and disadvantage and directing resources and services towards those

who are experiencing systemic marginalization to ensure equal outcomes for all. Equity is the ideal and goal of creating a just and fair society in which everyone can take part, prosper, and reach their full potential. There are 4 types of equity:

- 1. **Procedural equity** inclusive, accessible, and authentic representation in decision-making.
- 2. **Distributional equity** fair distribution of benefits and burdens across all segments of a community, prioritizing those with highest need.
- 3. **Structural equity** decisions are made with a recognition of the historical, cultural, and institutional dynamics and structures that have routinely advantaged privileged groups.
- 4. **Transgenerational equity** decisions consider generational impacts and don't unfairly burden future generations.⁸

Accordingly, we apply an **Equity Lens**, asking:

- □ "Who will benefit from this intervention?
- ☐ Who might be excluded from those benefits and why? Who might be harmed?
- ☐ How might some population groups be unfairly burdened or privileged today or in the future?
- ☐ Have important decisions been made with the direct input of those who will be most affected by that decision?
- ☐ From whose perspective are you evaluating the 'success' of your project or policy"?

Impact-driven

We help clients define what impact means to them and map the systems and underlying structures that may need to be altered to ensure a deep and longlasting positive change.

⁸ National Resources Defense Council (2019). Definitions of Equity, Inclusion, Equality and Related Terms. Available online: https://www.broward.org/Climate/Documents/EquityHandout_082019.pdf



⁷ Patton, M.Q. (2021). *Utilization-focused Evaluation* (5th edition). Sage Publications Inc.

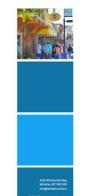
Case Studies

Invermere Housing Needs Assessment

Invermere, BC

In 2020, we assessed Invermere's current housing availability, suitability, and affordability across the entire housing continuum from basic shelter to the availability of high-end real estate. To do so, we estimated current and future housing needs for the District of Invermere, by analyzing demographic and housing data from a variety of government data sources such as BC Statistics and Statistics Canada and undertaking a community survey that had 294 responses.







Whistler2020 Monitoring

Whistler, BC

Whistler2020 is the Resort Municipality of Whistler's award-winning community sustainability plan, amongst the first of its kind developed in Canada in 2004-05. We facilitated the development and ongoing management of the plan, including annual monitoring and development of current reality reports for each of strategy area, facilitating annual Task Force action planning, supporting action implementation, and reporting on progress indicators.



Resources

Pre-Formative - Developmental Evaluation

Answering the question: "What is it?"

Description

Developmental Evaluation (DE) is an evaluation approach that can assist social innovators develop social change initiatives in complex or uncertain environments. DE originators liken their approach to the role of research and development in the private sector product development process because it facilitates real-time, or close to real-time, feedback to program staff thus facilitating a continuous development loop. Michael Quinn Patton (2010) suggests using this approach when responsiveness to context is of the utmost importance. He describes it as:

DE supports innovation development to guide adaptation to emergent and dynamic realities in complex environments. Innovations can take the form of new projects, programs, products, organizational changes, policy reforms, and system interventions. A complex system is characterized by many interacting and interdependent elements in which there is no central control. Patterns of change emerge from rapid, real-time interactions that generate learning, evolution, and development – if one is paying attention and knows how to observe and capture the important and emergent patterns. Complex environments for social interventions and innovations are those in which what to do to solve problems is uncertain and key stakeholders are in conflict about how to proceed.⁹

Methodology

DE favours methodological flexibility and adaptability, systems thinking, creative and critical thinking balanced. The evaluator should have a high tolerance for ambiguity and be able to facilitate rigorous evidence-based perspectives. While DE is not distinguished by its methods, an inquiry framework can be useful for discovery, analysis and problem solving that can guide us in developing questions and selecting methods. Evaluation users should also identify priority questions that match the situation and contribute to the evaluation design. A scope of work can help to shape the DE plan and process.

Results



⁹ Patton, M. Q. (2016). The Developmental Evaluation Mindset. In M. Q. Patton, K. McKegg, & N. Wehipeihana (Eds.), Developmental Evaluation Exemplars (pp. 306–329). The Guilford Press.

DE should provide rapid, real-time results, diverse user-friendly forms of feedback, and should nurture learning. DE results should:

- Deepen understanding of the effectiveness of innovative strategies
- Help in adapting those strategies as they are being implemented in unpredictable environments

Resources

Guides

- Developmental Evaluation. Applying Complexity Concepts to Enhance Innovation and Use In this book, Michael Quinn Patton describes how to conduct evaluations using the DE framework. By using a range of case studies, stories, and cartoons, he demonstrates how DE can be used for a range of different evaluation purposes. (375 Pages)
- A practitioner's guide to developmental evaluation this book highlights some of the key practices of Developmental Evaluation (DE) by exploring a three-year multi-site case study of developmental evaluations. Furthermore, It offers suggestions for implementing DE in a range of situations and includes a variety of resources to help with its facilitation. (77 Pages) (J.W. McConnell Family Foundation)
- A developmental evaluation primer this book uses a range of innovative case study examples to demonstrate the basic ideas of DE and its implementation. It also highlights the essential skills of the developmental evaluator and some of the many tools that can be used to support its implementation. (69 Pages) (J.W. McConnell Family Foundation)
- Implementing Developmental Evaluation A Practical Guide for Evaluators and Administrators a resource for scoping DE and implementing it (75 Pages). https://www.usaid.gov/sites/default/files/documents/15396/ImplementingDE_Admin_20.pdf

Videos

- **Developmental evaluation compared with R&D** Michael Quinn Patton discusses the relationship between developmental evaluation and the research and development process and suggests that the use of DE in public policy can play a similar role to R&D in the private sector by assisting innovation and experimentation.
- **Developmental evaluation as alternative to formative assessment** Michael Quinn Patton outlines the differences between developmental, formative, and summative evaluation by describing DE as an evaluation for a developing or emerging initiative while summative and formative evaluation are used to examine established programs.



Planning and Evaluating for Social Change: An Evening at SFU with Michael Quinn
 Patton - in this presentation, Michael Quinn Patton focuses on the changing landscape of
 evaluation with examples and interactive exercises in order to demonstrate how a
 developmental evaluation framework can be used to connect people and create more effective
 social change strategies.

Websites

- **The Developmental Evaluation Institute** this website aims to provide pathways for new, emerging, and mid-career evaluators to develop skills in Developmental Evaluation for social justice.
- **<u>Developmental evaluation</u>** this webpage provides links to six audio files of an interview between Mark Cabaj and Michael Patton on development evaluation in which they discuss: the power of evaluation thinking; the value of evaluation in developmental situations; the what & why of "patch evaluation"
- Living History: A Developmental Evaluation Tool

Formative Evaluation

Answering the question "Will it work?"

Description

Formative evaluation refers to the intended use of the evaluation (to make improvements). A formative evaluation ensures that a program or program activity is feasible, appropriate, and acceptable before it is fully implemented. It is usually conducted when a new program or activity is being developed or when an existing one is being adapted or modified and guides the development of materials and techniques that would appeal to the target audience. Data collection can occur at multiple points in time: before, during and/or after the program is implemented. It is also useful for producing a baseline which could be used for a later summative evaluation.



Methodology

Dialogic and open methods work well for formative evaluations and include approaches like quality improvements, learning reviews, appreciative inquiry (see textbox), reflective practice, and participant feedback.

Formative Questions:

- 1. What do various stakeholders participants, staff, administrators, funders — consider important to the program? How similar or different are those perceptions? What is the basis for and what are the implications of different perceptions?
- 2. What is the participant and staff feedback about program processes? What is working well and not working so well, from their perspectives?
- 3. What challenges and barriers have emerged as the program has been implemented? How have staff responded to these challenges and barriers? What 'bugs' do you need to work out?
- 4. What original assumptions have been proven true? What assumptions appear problematic? How accurate has the original needs assessment been? To what extent, if at all, are
 - participants' 'actual' needs different from what you planned?
- 5. What do participants actually do in the program? What are their primary activities (in detail)? What do they experience? To what extent are those experiences yielding the immediate results or short-term outcomes you desired? Why or why not? In essence, does the model appear to be working?
- 6. What do participants like and dislike? Do they know what they are supposed to accomplish as participants? Do they 'buy into' the program's goals and intended outcomes?
- 7. How well are staff functioning together? Do they know about and agree on what outcomes they are aiming for? To what extent do they agree with the program's goals and intended outcomes? What are their perceptions of participants? Of administrators? Of their own roles and effectiveness?

Appreciative Inquiry is often presented in terms of a 4-step process around an affirmative topic choice:

- **1. DISCOVER:** What gives life? What is the best? Appreciating and identifying processes that work well.
- 2. DREAM: What might be? What is the world calling for? Envisioning results, and how things might work well in the future.
- 3. **DESIGN:** What should be--the ideal? Coconstructing - planning and prioritizing processes that would work well.
- 4. DESTINY (or DELIVER): How to empower, learn and adjust/improvise? Sustaining the change



- 8. What has changed from the original design and why? Why are adaptations from the original design being made? Who needs to 'approve' such changes? How are these changes being documented and reflected on, if at all?
- 9. What monitoring system has been established to assess implementation on an ongoing basis and how is it being used?

Data Sources:

- 1. Client socio-demographic characteristics
- 2. Client service usage (type and number of services clients received)
- 3. Referral sources (referral and co-ordinating agency perspectives of program strengths and weaknesses)
- 4. Staff characteristics:
 - Professional degrees
 - Experience
 - Socio-demographics
 - Staff perceptions of program strengths and weaknesses
- 5. Program activities:
 - Special events and meetings
 - Staff meetings
 - Training
 - Program protocols, procedures, and training manuals
 - Any information to answer the questions: 'What happens to clients?' and 'What is the program?"
 - Observing program activities: is the program being implemented as it is supposed to be?
- 6. Minutes of board, staff, and committee meetings
- 7. Correspondence and internal memos about the project
- 8. Client satisfaction data; client reports of program strengths, weaknesses, and barriers
- 9. Financial data; program costs and expenditures

Results

A formative evaluation should render insight into:

- What's working/ not working
- Program participants' experiences

Resources

Formative Evaluation Toolkit: A Step-by-step guide and resources for evaluating program implementation and early outcomes (2018). This toolkit introduces formative evaluation, a method for evaluating programs during early implementation to inform program improvement and assess readiness for rigorous summative evaluation. By JBA: James Bell Associates



Appreciative Inquiry Commons: This website from **Case Western Reserve University** is an online portal which aims to facilitate the sharing of academic resources and practical tools on Appreciative Inquiry (Al).

Process / Implementation Evaluation

Answering the question "Is it working (early stage)?"

Description

Process evaluation refers to the focus of an evaluation (how it is being implemented) and looks at the design and procedural elements of the process itself. These may include measures of inclusivity, fairness, transparency, accessibility, and the degree to which participants can make or influence decisions extent to which process engender learning, as well as effectiveness and efficiency.

Methodology

Process evaluation usually entails qualitative and quantitative methods.

Frameworks¹⁰

PRINCIPLES	CRITERIA	SAMPLE INDICATORS	METHODS & DATA SOURCES
	Representative affected populations are actively engaged	# / % of each segment of target population, # of targeted outreach activities	Background research, secondary data, Event / participant surveys
	Inclusive equity seeking groups are actively engage	# / % persons at events with Disabilities; Women; Racialized groups; Lesbian, Gay, Bisexual, Trans, Queer, Two-Spirit Communities (LGBTQ2S); Undocumented workers; Immigrants and refugees; Persons with low income; Youth; # of materials translated into various languages	Background research, secondary data, Event / participant surveys
EQUITY- CENTERED	Fair participants have opportunity to contribute equally per their capacity/interests /roles	# of participants reporting processes were fair, # of roles changed, \$ salary distribution b/w staff	Participant surveys
	Accessible accommodations are made for those who identify need	\$ in budget for accommodations, # communications materials inviting folks to identify need(s)	Financial report on spending Background research, secondary data re: needs
	Transparent participants understand how decisions are made	# open records, # open / public meetings, # opportunities to review / revise materials	Background research, secondary data,

¹⁰ Slater, K. (2020, August 18-21). Capturing, creating and catalyzing social learning in service of sustainability transitions: evaluating the impact of small-scale sustainability interventions in the Greater Toronto and Hamilton Area [paper presentation in dialogue session]. 11th International Sustainability Transitions (IST) Conference online from Vienna, Austria. http://www.ist2020.at



		Event / participant surveys
Influential Shape decisions	# of decision makers at meetings; # of advisory boards leaders sit on, # policies; # voting opportunities	Policy review

PRINCIPLES	CRITERIA	SAMPLE INDICATORS	METHODS & DATA SOURCES
	Dialogue Sharing of experiences, information, values, and beliefs free of judgement	# of facilitated meetings / events, # of participants reporting processes promoted dialogue	Participant surveys, facilitation evaluation
LEARNING- FOCUSED	Negotiation A give and take process to find common ground and reach an agreement	# / % of decisions by consensus	Examination of governance structure
	Surfacing Assumptions Space is provided to reflect and explore mistakes, conflict, and underlying assumptions	# of participants reporting processes offered space for reflection	Participant surveys

PRINCIPLES	CRITERIA	SAMPLE INDICATORS	METHODS & DATA SOURCES
	Participants	# participants, participant feedback, % of target audience engaged	Meeting / event attendance lists, participant surveys, feedback forms, interviews
& EFFICIENCY	Outputs & Deliverables	# of products created, % deliverables met	RFP, project plan. Products (Reports, communications materials)
	Schedule	% deliverables met on time	Gantt chart, project plan, timeline
	Budget & Resources	\$ budget, # of personnel / volunteers, \$ training, # personnel receive training, # partnerships and other supports	Budget, Personnel survey distribution, message
	Barriers & Solutions	# barriers identified / overcome	Meeting notes, SWOT exercises

Results

The results of a process evaluation will strengthen your ability to report on your program and use information to improve future activities. It allows you to track program information related to Who, What, When and Where questions:

• To whom did you direct program efforts?



- Where did your program activities take place?
- What has your program done?
- What are the barriers/enablers to implementation?
- When did your program activities take place?

Resources

Program evaluation toolkit: Tools for planning, doing, and using evaluation. This toolkit contains resources for planning, doing, and using program evaluation. These worksheets can assist your team in focusing on what is important and feasible as you begin to formulate and implement your evaluation project.

University of Calgary Program Evaluation Toolkit The Program Evaluation Toolkit presents a step-by-step process for conducting your own program evaluation. The **Quick Start Guide** will help you decide if you are ready to use this toolkit and where to start.

REL Program Evaluation Toolkit: Program evaluation is important for assessing the implementation and outcomes of local, state, and federal programs. Designed to be used in a variety of education settings, the toolkit focuses on the practical application of program evaluation for all users. The toolkit can also build your understanding of program evaluation so that you can be better equipped to understand the evaluation process and use evaluation practices.

The toolkit includes eight modules that begin at the planning stages of an evaluation and progress to the presentation of findings to stakeholders. Each module covers a critical step in the evaluation process.

The toolkit includes guided instructional videos that provide an overview of each stage in the evaluation process. It also includes handouts, worksheets, and tools to help you conduct your own evaluation. Resources in the toolkit will help you create a logic model, develop evaluation questions, identify data sources, develop data collection instruments, conduct basic analyses, and disseminate findings.

Summative Evaluation

Answering the question "Did it work?"

In evaluating interventions, summative evaluation tends to fall into two relative categories: outcomes and impact. The two are largely differentiated by the time horizon and complexity of results, with outcomes looking at more immediate results and impact evaluation examining longer or deeper changes resulting from an intervention.

1.Outcomes / Effectiveness Evaluation



Description

An outcome evaluation measures a program's short-term and longer-term results and determines whether intended outcomes were achieved. The desired outcomes are the anticipated changes that will occur in the target group because of an intervention. It tests hypotheses by comparing conditions before and after participation, by comparing participants with similar individuals who did not participate, or by comparing a combination of both. Specifically, it examines how an intervention affects participants (e.g., in terms of capacity building or enhanced civic engagement); the products or outputs of the intervention (e.g., reports, policies) and their use by policymakers or other decision-makers¹¹¹²

In the evaluative framework advanced through Williams' thesis work (2019) and by Williams & Robinson (2020),¹³ outcomes are categorized as first-order (direct) outputs and outcomes (the short term "splash" from a specific intervention) such as enhanced capacity, network strengthening, and creation of usable products (e.g., action plans, web sites, new technologies) followed by second-order (indirect) outcomes ("the ripples", which are effects that typically take longer to appear) such as structural changes (e.g., new policies, organizational changes), policy level decisions and actions.¹⁴

Methodology

Outcome evaluation often requires statistical analysis methods in addition to qualitative methods. Measurement criteria and indicators should be informed by the objectives of the intervention. While by no means exhaustive, the following list of outcomes are among some of the most common to consider, having both substantive value – in that they are important in and of themselves- as well as instrumental value – in that they create enabling conditions for the achievement of other aims. Evaluation should include consideration of the inputs (funding, staff time, space etc.) required to produce each outcome, any indirect or unintended consequences of each outcome, and a reflection on the extent to which outcomes are self-perpetuating (sustainable).

Framework¹⁵

PRINCIPLES	CRITERIA	SAMPLE INDICATORS	METHODS & DATA SOURCES
		% of participants self-reporting that they have confidence in project / program, and/or trust in program leaders; # of	Participant surveys

¹¹ Barrett, G., Wyman, M., & Coelho, V. S. P. (2012). Assessing the policy impacts of deliberative civic engagement. In T. Nabatchi, J. Gastil, M. Leighninger, & G. M. Weiksner (Eds.), *Online deliberation design: Choices, criteria, and evidence*. Oxford University Press. http://doi.org/10.1093/acprof:oso/9780199899265.001.0001

¹⁵ Slater, K. (2020, August 18-21). Capturing, creating and catalyzing social learning in service of sustainability transitions: evaluating the impact of small-scale sustainability interventions in the Greater Toronto and Hamilton Area [paper presentation in dialogue session]. 11th International Sustainability Transitions (IST) Conference online from Vienna, Austria. http://www.ist2020.at



¹² Caddy, J. (2005). *Evaluating public participation in policy-making*. OECD Publishing. Retrieved October 8, 2020, from http://www.eiaportal-atsk.eu/attachments/article/29/OECD%202005%20evalu%20pp.pdf

¹³ Williams, S. (2019). The splash and the ripples: assessing sustainability transition experiments (T). University of British Columbia. Retrieved January 9, 2020, from https://open.library.ubc.ca/collections/ubctheses/24/items/1.0383246

¹⁴ Williams, S., & Robinson, J. (2020). Measuring sustainability: An evaluation framework for sustainability transition experiments. *Environmental Science & Policy, 103*, 58-66. http://doi.org/10.1016/j.envsci.2019.10.012.

	Social cohesion- Relationship and trust building	new partners, # of new volunteers, #personnel attending partnership training programs	
	Justice, Equity, Diversity, Inclusion	% of participants / beneficiaries reporting favourably on all forms of JEDI; % of decision-making roles held by equity-denied individuals; # of JEDI training sessions; \$ spent on new roles, provisions, honoraria, equity supports.	Gini index, statistics Canada; participant surveys / feedback
SOCIAL BENEFITS	Health and wellbeing	# of services providers / population	Age / life expectancy; morbidity / mortality data; surveys, interviews, ethnography
	Basic material needs met (income, food, housing, clean water)	% of target population reporting high quality of life	Statistics Canada, surveys, interviews
	Crime & Safety	% reduction in crimes; % of target population reporting feeling safe	Police reported crime, Statistics Canada, survey, interviews
	Sustainable Consumption & Production	Tonnes of waste reduced / avoided, % of materials reused/regenerated, sustainability of material flows	Lifecycle assessment, waste audits
ECOLOGICAL BENEFITS	Climate action (mitigation + adaptation)	Tonnes of CO2 avoided, % GHGs reduced, \$ spent on reducing climate vulnerability	GHG accounting, carbon offsets, budgets
	Ecosystem Protection & Regeneration	# trees planted, # hectares conserved, # species protected / recovered	Ecosystem services calculations
ECONOMIC BENEFITS	Creating Local Economic Opportunities & Livelihoods	#/% new jobs created, \$ growth in local economy, # community benefits agreements signed, # participants/businesses in local market	Chamber of Commerce reports, Municipal financial reporting, surveys, Secondary data
	Positive behaviour change	# commitments to behaviour change made /signed, # participants report readiness for change, # of project personnel taking motivational interview training	Participant surveys, secondary data, See motivational interviewing techniques and Prochaska's stages of change.
	Policy & institutional change	# new policies / regulations, # decision-makers participating in project / program or attending engagements	Policy review, Secondary data
CROSS- CUTTING BENEEFITS	Useable Products	# new reports, # new programs, # new tools, # new approaches used by other groups	Secondary data, interviews with other groups
	Building <u>individual</u> capacity or fostering personal growth	# participants in training program, # new skills learned (self-report), % increase in employment, \$ increase in pay band / salaries, % program graduation	Participant surveys, skills proficiency testing, job acquisition reports, budgets
	Building <u>organizational</u> or institutional capacity	# training program attendees, # new jobs created, \$ invested in training and/or benefits, \$ saved / output	Secondary data
	Improved communications and information sharing	# communications pieces created or shared, # channels created or used, #'s reached, # of diverse audiences reached	Review website & social media analytics, media (digital and print) distribution metrics, participant surveys
	Network creation or strengthening	# of network members in a directory or phone tree, # of communications pieces shared, # other groups' meetings attended, # of joint organized events / initiatives	Review website & social media analytics, time spent on networking activities

Results



The results of an outcomes evaluation will provide a deeper understanding of the effectiveness of the program for meeting its short and longer-term objectives. It should reveal the changes, and effects of the program to determine the program's effectiveness.

- Outcome evaluations measure changes in knowledge, skills, attitudes, behaviors, and conditions of program participants.
- The goal of this design is to identify the effects and results of the program.
- This design also includes both qualitative and quantitative data collection methods; however, this type of evaluation more typically

It should answer questions like:

- Were staff who received intensive training more likely to effectively support beneficiaries than those who did not?
- Did the implementation of the intervention result in changes in knowledge, attitudes, and skills among the members of the target population?
- Did the intervention have any unintended (beneficial or adverse) effects on the target population(s)?
- Do the benefits of the intervention justify a continued allocation of resources?

Resources

Program Operations Guidelines for STD Prevention manual on program evaluation. The purpose of these guidelines is to further STD prevention by providing a resource to assist in the design, implementation, and evaluation of STD prevention and control programs.

2.Impact and Transformational Evaluation

Answering the question "what are the deeper, longer-term results?"

Description

An impact evaluation provides information about the longer or deeper results of an intervention. Impacts can be positive and negative, intended, and unintended, direct, and indirect. Some insist that impact evaluation <u>must</u> therefore establish what has been the cause of observed changes (in this case 'impacts') referred to as causal attribution (also referred to as causal inference). Following Williams, Robinson (2020) and others, we argue that attribution is impossible in the context of complexity and the focus of an evaluation should therefore be on contributions to systems change with a focus on addressing background conditions that lock-in challenges.



Methodology

Impact evaluation should be planned formally and managed as a discrete project, with decision-making processes and management arrangements clearly described from the beginning of the process. One of the first steps is to define impact and frame its boundaries. Impacts are usually understood to occur later than, and as a result of, intermediate outcomes. The distinction between outcomes and impacts can be relative and depends on the stated objectives of an intervention. It should also be noted that

mapping can be a valuable tool for understanding the components and dynamics of a system or interacting systems influencing an intervention and its impact. Some great tools for creating systems-maps include **Kumo** and **Insight Maker**. See inset for an example of a systems-map created in Kumo. A theory of change is another useful exercise for framing a problem area and identifying a desired impact, in turn forming the basis for an impact evaluation.

some impacts may be emergent, and thus, cannot be predicted. Systems-

About the Map | Commitment to the Commitment to

Sample Frameworks

Once impact has been defined, a set of principles can be derived, which in turn inform indictors. Common indicators for measuring impact are the OECD-DAC criteria (OECD-DAC accessed 2015):

- *Relevance*: The extent to which the objectives of an intervention are consistent with recipients' requirements, national needs, global priorities, and partners' policies.
- *Effectiveness*: The extent to which the intervention's objectives were achieved, or are expected to be achieved, considering their relative importance.
- *Efficiency*: A measure of how economically resources/inputs (funds, expertise, time, equipment, etc.) are converted into results.
- *Impact*: Positive and negative primary and secondary long-term effects produced by the intervention, whether directly or indirectly, intended, or unintended.
- *Sustainability*: The continuation of benefits from the intervention after major development assistance has ceased. Interventions must be both environmentally and financially sustainable. Where the emphasis is not on external assistance, sustainability can be defined as the ability of



key stakeholders to sustain intervention benefits – after the cessation of donor funding – with efforts that use locally available resources.

Note the overlap with process and outcomes measures.

The following two frameworks offer a different approach for measuring impact and transformational change.

Impact Evaluation¹⁶

PRINCIPLES	CRITERIA	SAMPLE INDICATORS	METHODS & DATA SOURCES
STRUCTURAL CHANGE- ADDRESSING SYSTEMS OF OPPRESSION	Advancing economic Justice -eradicating poverty, polarization of wealth	Analysis and markers of change re: power, labour, human rights	SDGs, longitudinal studies, ethnographic accounts, interviews, national statistics, modeling
	Advancing social justice – dismantling patriarchy, white supremacy, colonialism	Analysis and markers of change re: power, gender, race, free prior and informed consent, truth and reconciliation calls to action, human rights	SDGs, longitudinal studies, ethnographic accounts, interviews, national statistics, key policy documents (UNDRIP, Truth and Reconciliation's 94 calls to action)
	Advancing ecological justice – tackling ecocide, rights of non-humans, intrinsic value of all life	Analysis and markers of change re: planetary boundaries, tipping points, rights of the nonhumans	SDGs, longitudinal studies, ethnographic accounts, interviews, national statistics
WAYS OF BEING & MINDSETS	Values	Evidence of new values, appreciation, moral/ethical standards	Discourse analysis, interviews,
	Norms	New procedures, job roles, standards, practices	Organizational / institutional procedures, cultural practices
	Narratives	Codification of new thinking in stories, policies, culture	Media scanning, discourse analysis
SYSTEMS- CHANGE	Adaptive sustainability	Sustainability (self-perpetuating and advancing SDGs), resilience (bouncing forward after stress), adaptability	SDGs
	Horizontal linkages	Institutional and sectoral connectedness; quality of relationships, partnerships, and service-provision	Social network mapping, stakeholder mapping
	Vertical linkages (scale)	Replicating and complexifying across scales	Social network mapping, stakeholder mapping

Transformational Evaluation¹⁷



¹⁶ Slater, K., & Robinson, J. (2020). Social Learning and Transdisciplinary Co-Production: A Social Practice Approach. *Sustainability*, 12(18), 7511. DOI: https://doi.org/10.3390/su12187511

¹⁷ Patton, M.Q. (2020) Evaluation Criteria for Evaluating Transformation: Implications for the Coronavirus Pandemic and the Global Climate Emergency, *American Evaluation Association*, 42 (1). DOI: https://doi.org/10.1177/1098214020933

Criteria	Guidance		Potential Operational Dimensions and Concepts	
1. Transformation fidelity	Assess the extent to which the realities of transformational change initiatives match transformational aspirations and rhetoric. Ensure that what is called transformation constitutes transformation Evaluate whether and how what is called transformational engagement constitutes a trajectory toward transformation		Transformation defined contextually Theory of transformation Transformation trajectory Transformational engagement Transformation elements	
2. Complex systems framing	Assess systems transformation using systems thinking principles and complexity concepts Ensure that transforming systems is the transformational focus Apply complex systems understandings and frameworks in evaluating transformation		Systems	
			Boundaries Perspectives Relationships Dynamics	
3. Eco-efficiency full-cost accounting	Document and assess the full costs and benefits of systems transformations, including economic, social, and environmental dimensions Compare the full costs and benefits of boseline versus transformed systems Evaluate whether, how, and to what extent transformational engagement generates net eco-efficient benefits	Triple bottom line Externalities Cological, economic, societal costs, and benefits Direct and indirect costs and benefits Transparency		
4. Adaptive sustainability	Evaluate transformational sustainability as manifesting ecosystem resilience and adaptability at the nexus between humans and the environment Employ a dynamic view of sustainability Make the ecosystem viability the focus of sustainability not a program, project, or intervention		Resilience Adaptability Sustainability Ecosystem vitality	
5. Diversity/equity/inclusion (DEI)	Evaluate how transformational engagement manifests the values of DEI Evaluate whether, how, and to what extent transformational engagement enhances systems level diversity, equity, and inclusion Equity			
6. Interconnectedness momentum	Identify, understand, and evaluate the interconnections that are essential and integral to transformation Evaluate whether, how, and to what extent interconnections among people, networks, institutions, ideas, and movements are deepened and enhanced to support, nurture, cotalyze, and accelerate transformational trajectories Evaluate whether, how, and to what extent dysfunctional and constraining interconnections are disrupted and broken to liberate positive transformational energy and momentum	Interrelationships Interdependencies Integration Alignment Acceleration Critical mass Tipping points		

Results

Impact evaluation should answer a small number of high-level key evaluation questions (KEQs) drawing from a combination of evidence. The results of an impact evaluation should offer a deeper understanding of the complex system in which an intervention is situated, interdependencies, and an intervention's contributions to enduring change.

Resources

Impact Evaluation in Practice: The second edition of the Impact Evaluation in Practice handbook is a comprehensive and accessible introduction to impact evaluation for policymakers and development practitioners. The book incorporates real-world examples to present practical guidelines for designing and implementing impact evaluations. Readers will gain an understanding of impact evaluation and the best ways to use impact evaluations to design evidence-based policies and programs.

Guide to Rapid Impact Evaluation: This guide provides an overview of the method for rapid impact evaluation (RIE)- a structured way to gather expert assessments of a program's impact. An RIE engages a number of experts to provide a balanced perspective on the impacts of a program and ultimately increase acceptance and adoption of the RIE's findings. Each expert assesses program outcomes relative to a **counterfactual**, which is an alternative program design or situation, to assess the program's impact relative to alternatives. Three types of experts are consulted:



- program stakeholders who affect the program or are affected by it
- external subject matter experts
- technical advisors

Evaluation and impact measurement for the social economy: exploring issues of attribution vs. contribution.

Supplemental Tools

Inquiry Frameworks¹⁸

Framework	Description				
After action review	What did we do well that we should keep doing? What can we do better next time?				
Basic questions	Who, what, where, when why and how?				
What? So What? Now What?	 Explores what is emerging and being developed; what these findings might mean for how you about the challenge, how you are addressing it, and judging what is working or not; and then thinking about how to act on the findings in the next iteration of effort. 				
Actual-ideal comparison	 Comparative framework that looks at: Where did we begin? Where did we want to get to? Where are we now? How does where we wanted to be compare with where we ended up? What do we do next? These can be adapted and revised in a developmental process. 				
Appreciative inquiry	 A strengths-based approach designed to support ongoing learning and adaptation by identifying and investigating outlier examples of good practice and ways of increasing their frequency. 				
Most significant change	 Approach primarily intended to clarify differences in values among stakeholders by collecting and collectively analysing personal accounts of change. 				
Policy advocacy framework	 Helps advocates to think more specifically about audiences — who is expected to change and how, and what it will take to get them there. Helps support thinking about the theories of change that underlie public policy advocacy strategies. 				
System mapping	 Explores through questions about perspective (e.g., What are the different ways in which this situation can be understood?), boundaries (e.g., What makes a difference to the way a situation is understood or behaves?) and relationships (e.g., What is the nature of interrelationships within the system?). 				
Outcome mapping	 An impact evaluation approach that unpacks an initiative's theory of change provides a framework to collect data on immediate, basic changes that lead to longer, more transformative change, and allows for the plausible assessment of the initiative's contribution to results via boundary partners. 				
Values-driven	 Assessing how something is done, and the nature and extent to which actions and decisions align with values, principles, and a desired approach. 				
Innovation horizon level	A three-level framework that differentiates between incremental and transformational innovation.				

¹⁸ Cabaj, M. (2019). Evaluating Systems Change Results: An Inquiry Framework, *Tamarack Institute*, Retrieved June 6, 2020, from https://www.tamarackcommunity.ca/hubfs/Resources/Publications/Paper%20Evaluating%20Systems%20Change%20Results%20Mark%20Cabaj.pdf



Complexity framing	Distinguishing between simple, complicated, and complex situations.
D,V,F,I	 A design framework that prompts an assessment of the desirability, viability, feasibility, and potential impact of a new idea.





Comprehending Complexity

The table below is a visual summary of many features of complexity. 19

¹⁹ The Visual Representation of Complexity, by Dr. Joanna Boehnert in McConnell Foundation (2021) A Developmental Evaluation Companion.



Unpredictability	Adaptation	Feedback	Tipping Points
2 P			
Nested Systems	Unknowns	Path Dependency	Change Over Time
Emergence	Levers and Hubs	Non-linerarity	Distribtued Control
$ \stackrel{\circ}{\circ} \stackrel{\circ}{\circ} \rightarrow \stackrel{\downarrow}{\downarrow} \stackrel{-}{\downarrow} \stackrel{-}{\downarrow} $		♀	
Open Systems	Self- organization	Multiple Scales and Levels	Domains of Stability
→ → → → → → → → → → → → → → → → → → →	\rightarrow		∵ ✓✓✓

References

- Atlanta, Georgia: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; Division of Nutrition, Physical Activity, and Obesity. (2011) Developing an Effective Evaluation Plan.
- Barrett, G., Wyman, M., & Coehlo, V. S. P. (2012). Assessing the policy impacts of deliberative civic engagement. In T. Nabatchi, J. Gastil, M. Leighninger, & G. M. Weiksner (Eds.), *Online deliberation design: Choices, criteria, and evidence*. Oxford University Press. http://doi.org/10.1093/acprof:oso/9780199899265.001.0001
- Beers, P.J., Hermans, F., Veldkamp, T., & Hinssen, J. (2014). Social learning inside and outside transition projects: Playing free jazz for a heavy metal audience, *NJAS Wageningen Journal of Life Sciences*, 69, 5-13. https://doi.org/10.1016/j.njas.2013.10.001.
- Beers, P., Sol, J., & Wals, A. (2010). Social Learning in a Multi-Actor Innovation Context. 9th European IFSA Symposium, 4 -7 July 2010, Vienna (Austria).
- Beers, P. J., Van Mierlo, B., & Hoes, A.C. (2016). Toward an Integrative Perspective on Social Learning in System Innovation Initiatives. *Ecology & Society, 21*(1), 33 http://doi.org/10.5751/ES-08148-210133
- Berkowitz, J., Huhman, M., Heitzler, C., Potter, L., Nolin, M., & Banspach, S. (2008) Overview of Formative, Process, and Outcome Evaluation Methods Used in the VERB Campaign. American Journal of Preventative Medicine, 34, 6, S222-S229. DOI: https://doi.org/10.1016/j.amepre.2008.03.008
- BetterEvaluation (2022) Available online: https://www.betterevaluation.org/en/what-evaluation-slider
- Caddy, J. (2005). *Evaluating public participation in policy-making*. OECD Publishing. Retrieved October 8, 2020, from http://www.eiaportal-at-sk.eu/attachments/article/29/OECD%202005%20evalu%20pp.pdf
- Cabaj, M. (2011). *Developmental Evaluation: The Experience and Reflections of Early Adopters*, Master's Thesis, University of Waterloo, Retrieved June 6, 2020, from: https://uwspace.uwaterloo.ca/bitstream/handle/10012/6204/Cabaj_Mark.pdf?isAllowed=y&sequen ce=1
- Cabaj, M. (2019). Evaluating Systems Change Results: An Inquiry Framework, *Tamarack Institute*, Retrieved June 6, 2020, from



- https://www.tamarackcommunity.ca/hubfs/Resources/Publications/Paper%20Evaluating%20Systems%20Change%20Results%20Mark%20Cabaj.pdf
- Center for Disease Control (2018). Program Operations Guidelines for STD Prevention manual on program evaluation. http://www.cdc.gov/std/program/ProgEvaluation.pdf.
- Fetterman, D.M. (1994). Empowerment evaluation. *American Journal of Evaluation*, *15*(1), 1-15. https://doi.org/10.1177/109821409401500101
- Fetterman, D. (2017). *Empowerment Evaluation. Better Evaluation*. Retrieved April 1, 2021, from https://www.betterevaluation.org/en/plan/approach/empowerment_evaluation
- Fetterman, D. M. (2000). Steps of empowerment evaluation: from California to Cape Town. In D. L. Stufflebeam, G. E. Madaus, & T. Kallaghan. (Eds.). *Evaluation Models: Viewpoints on Educational and Human Services Evaluation*, (pp. 395-408). Kluwer Academic Publishers.
- Fiorino, D. J. (1990). Citizen Participation and Environmental Risk: A Survey of Institutional Mechanisms. *Science, Technology & Human Values, 15*(2), 226–243. http://doi.org/10.1177/016224399001500204
- Folke, C., Carpenter, S. R., Walker, B., Scheffer, M., Chapin, T., & Rockstrom, J. (2010). Resilience thinking: integrating resilience, adaptability, and transformability. *Ecology and Society*, *15*(4). http://doi.org/10.2307/26268226
- Folke, C., Colding, J., & Berkes, F. (2003). Synthesis: building resilience and adaptive capacity in social-ecological systems. In *Navigating social-ecological systems: building resilience for complexity and change,* F. Berkes, J. Colding, and C. Folke, (Eds). Cambridge University Press (pp. 352-387). http://doi.org/10.1017/CBO9780511541957.020
- Freire, P. (1985). Reading the World and Reading the Word: An Interview with Paulo Freire. *Language Arts*, *62*(1), 15-21. Retrieved April 18, 2021, from http://www.jstor.org/stable/41405241
- Gamble, J. A. A. (2008). *A developmental evaluation primer*. The J.W. McConnell Family Foundation, (2008). Retrieved January 4, 2020, from http://mcconnellfoundation.ca/report/a-developmental-evaluation-primer/
- Gopal, S & Preskill, H (2014). What is Evaluation, Really? FSG: Imagining Social Change. Available online: https://www.fsg.org/blog/what-evaluation-really/
- Guijt, I. (2014). Participatory Approaches, *Methodological Briefs: Impact Evaluation 5*, UNICEF Office of Research, Florence. Retrieved from: http://devinfolive.info/impact_evaluation/img/downloads/Participatory_Approaches_ENG.pdf



- McConnell Foundation (2021) *A Developmental Evaluation Companion*. Available online: https://mcconnellfoundation.ca/wp-content/uploads/2021/06/A-Developmental-Evaluation-Companion-McConnell-Foundation-2.pdf?utm_medium=email&_hsmi=114998029&_hsenc=p2ANqtz-94eY2_lHVBsJx3RrKrfF2pmiHBFfKcvSCZBWsKssGRjxXKjQGBzkAiFQUbhbinNPzVWU-1JUhnpYrUP8nxBGPxa5BggA&utm_content=114998029&utm_source=hs_automation
- Mohr LB. Impact Analysis for Program Evaluation. Thousand Oaks: Sage, 1995.

 Patton, M.Q. (2008). *Utilization-Focused Evaluation*. (4th ed., pp. 637). Sage Publications, Inc.
- Mutz, D. C. (2008). Is Deliberative Democracy a Falsifiable Theory? *Annual Review of Political Science*, *11*(1), 521–538. http://doi.org/10.1146/annurev.polisci.11.081306.070308
- National Resources Defense Council (2019). Definitions of Equity, Inclusion, Equality and Related Terms. Available online: https://www.broward.org/Climate/Documents/EquityHandout_082019.pdf
- O'Brien, K. L., Sygna, L., Datchoua, A., Pettersen, S., & Rada, R. (2018). Transformations in socio-ecological systems. In M. Asquith & T. Lung (Eds.), *Perspectives on Transitions to Sustainability* (pp. 28–44). European Environment Agency.
- Patton, M. Q. (2016). The Developmental Evaluation Mindset. In M. Q. Patton, K. McKegg, & N. Wehipeihana (Eds.), *Developmental Evaluation Exemplars* (pp. 306–329). The Guilford Press.
- Patton, M. Q. (2018). Principles Focused Evaluation: The GUIDE. Guilford Press.
- Patton, M. Q., McKegg, K., & Wehipeihana, N. (Eds.). (2016). *Developmental Evaluation Exemplars*. Guilford Press.
- Patton, M.Q. (2020) Evaluation Criteria for Evaluating Transformation: Implications for the Coronavirus Pandemic and the Global Climate Emergency, *American Evaluation Association*, 42 (1). DOI: https://doi.org/10.1177/1098214020933
- Patton, M.Q. (2021). *Utilization-focused Evaluation* (5th edition). Sage Publications Inc.
- Peersman, G. (2015) *Impact evaluation*. BetterEvaluation. Retrieved from http://www.betterevaluation.org/themes/impact_evaluation
- Province of Ontario (2017). Finding the Right Fit: Age-Friendly Community Planning. Available online: https://www.ontario.ca/document/finding-right-fit-age-friendly-community-planning/appendix-v-formative-and-summative-evaluation-framework#



- Regional Educational Laboratory Program (2022). Program Evaluation Toolkit. Available online: https://ies.ed.gov/ncee/rel/Products/Resource/100644
- Robinson, J. (2004). Squaring the circle? Some thoughts on the idea of sustainable development. *Ecological Economics*, *48*(4), 369–384. http://doi.org/10.1016/j.ecolecon.2003.10.017
- Robinson, J., & Cole, R. (2015). Theoretical underpinnings of regenerative sustainability, *Building Research & Information*, *43*(2), 133-143. http://doi.org/10.1080/09613218.2014.979082
- Robinson, J., & Tansey, J. (2006). Co-production, emergent properties and strong interactive social research: the Georgia Basin Futures Project. *Science and Public Policy*, *33*(2), 151–160. http://doi.org/10.3152/147154306781779064
- Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin, III, F.S., Lambin, E., Lenton, T. M., Scheffer, M., Folke, C., Schellnhuber, H., Nykvist, B., De Wit, C.A., Hughes, T., van der Leeuw, S., Rodhe, H., Sörlin, S., Snyder, P.K., Costanza, R. Svedin, U... & Foley, J. (2009). Planetary boundaries: exploring the safe operating space for humanity. *Ecology and Society*, *14*(2), 32. Retrieved April 9, 2021: http://www.ecologyandsociety.org/vol14/iss2/art32/
- Royse, D., Thyer, B. and Padgett, D. (2009). Program Evaluation: An Introduction, 5th edition. Belmont, CA: Wardsworth, Cengage Learning.
- Senge, P. (1990). *The fifth discipline: The Art and Practice of the Learning Organization.* Century Business.
- Shove, E., & Walker, G. (2010). Governing transitions in the sustainability of everyday life. *Research Policy*, 39(4), 471–476. http://doi.org/10.1016/j.respol.2010.01.019
- Shove, E., & Pantzar, M. (2005). Consumers, Producers and Practices: Understanding the Invention and Reinvention of Nordic Walking. *Journal of Consumer Culture*, *5*, 43-64. http://doi.org/10.1177/1469540505049846
- Slater, K. (2020, August 18-21). *Capturing, creating and catalyzing social learning in service of sustainability transitions: evaluating the impact of small-scale sustainability interventions in the Greater Toronto and Hamilton Area* [paper presentation in dialogue session]. 11th International Sustainability Transitions (IST) Conference online from Vienna, Austria. http://www.ist2020.at
- Slater, K., & Robinson, J. (2020). Social Learning and Transdisciplinary Co-Production: A Social Practice Approach. *Sustainability*, *12*(18), 7511. DOI: https://doi.org/10.3390/su12187511



Systems Thinker (2018). Systems Mapping Tools. Available online: https://thesystemsthinker.com/tools/

The World Bank. (2014). Cases in Outcome Harvesting. Washington, DC.

USAID (2019). Implementing Developmental Evaluation: A Practical Guide for Evaluators and Administrators. Available online: https://www.usaid.gov/sites/default/files/documents/15396/ImplementingDE_Admin_20.pdf

Williams, S. (2019). The splash and the ripples: assessing sustainability transition experiments (T). University of British Columbia. Retrieved January 9, 2020, from https://open.library.ubc.ca/collections/ubctheses/24/items/1.0383246

Williams, S., & Robinson, J. (2020). Measuring sustainability: An evaluation framework for sustainability transition experiments. *Environmental Science & Policy*, *103*, 58-66. http://doi.org/10.1016/j.envsci.2019.10.012.

